CLAIMS

1. An optical disc apparatus in which when focusing servo operation is not being performed, an objective lens is fixed at such a position as to be brought out of contact with an optical disc.

2. The optical disc apparatus as claimed in Claim 1, comprising:

an objective lens actuator for driving the objective lens; and

a drive control circuit for controlling the objective lens actuator;

wherein the objective lens actuator drives the objective lens to the position on the basis of a control signal from the drive control circuit.

3. The optical disc apparatus as claimed in Claim 1, comprising:

an objective lens actuator for driving the objective lens;

a drive control circuit for controlling the objective lens actuator; and

an objective lens fixture for fixing the objective lens;

wherein the objective lens actuator drives the objective lens to the position on the basis of a control signal from the drive control circuit and the objective lens

fixture fixes the objective lens at the position.

4. The optical disc apparatus as claimed in Claim 3, wherein the optical disc fixture includes an engageable portion formed on a support member for supporting the objective lens and a mating engageable portion for securing, through its engagement with the engageable portion, the support member to a base continuous with an optical stand, with the mating engageable portion being provided on a locking member mounted pivotally on the base.

5. The optical disc apparatus as claimed in Claim 3 or 4, further comprising:

an aberration correcting mechanism for correcting aberration of a beam spot on the optical disc;

wherein the aberration correcting mechanism actuates the objective lens fixture.

6. The optical disc apparatus as claimed in Claim 5, wherein the aberration correcting mechanism has an extended correction range wider than a range necessary for aberration correction and actuates the objective lens fixture in the extended correction range.

7. The optical disc apparatus as claimed in Claim 3, wherein an electric current including an AC signal component is applied to the objective lens actuator such that fixing of the objective lens by the objective lens fixture is cancelled.

8. The optical disc apparatus as claimed in Claim 7, wherein the AC signal component contains a resonant frequency of the objective lens actuator.

9. The optical disc apparatus as claimed in Claim 3, wherein a DC flowing in a direction for moving the objective lens away from the optical disc is applied to the objective lens actuator such that fixing of the objective lens by the objective lens fixture is cancelled.

10. The optical disc apparatus as claimed in Claim 4, further comprising:

an elastic member for urging the mating engageable portion of the locking member in a direction for bringing the mating engageable portion out of engagement with the engageable portion.

11. The optical disc apparatus as claimed in one of Claims 1 to 3, wherein a working distance of the objective lens is smaller than an amplitude of a planar deflection of the optical disc.

12. The optical disc apparatus as claimed in Claim 11, wherein a distance between an average position of one face of the optical disc adjacent to the objective lens and a position of a distal end of the objective lens is so set as to be not less than a half of the amplitude of the planar deflection of the optical disc.

13. The optical disc apparatus as claimed in one of

Claims 1 to 3, wherein an inactive duration is generated in transfer of information between the optical disc and an optical head by performing recording or reproduction of the optical disc at a transfer rate higher than an ordinary transfer rate such that the objective lens is fixed during the inactive duration.

14. The optical disc apparatus as claimed in one of Claims 1 to 3, wherein the objective lens has different first and second working distances relative to an optical disc including a cover layer and at least one further optical disc including a further cover layer having a thickness different from that of the cover layer of the optical disc, respectively;

wherein the optical disc has a first travel distance between its uppermost position and its lowermost position, while the further optical disc has a second travel distance between its uppermost position and its lowermost position, with the second travel distance being different from the first travel distance;

wherein a smaller one of the first and second working distances is set smaller than a larger one of the first and second travel distances;

wherein a distance between an average position of one face of the optical disc adjacent to the objective lens and a position of a distal end of the objective lens and a

distance between an average position of one face of the further optical disc adjacent to the objective lens and the position of the distal end of the objective lens are so set as to be not less than a half of the larger one of the first and second travel distances.

15. The optical disc apparatus as claimed in one of Claims 1 to 3, further comprising:

at least one further objective lens having a further working distance different from a working distance of the objective lens;

wherein the objective lens and the further objective lens are usable for an optical disc including a cover layer and a further optical disc including a further cover layer having a thickness different from that of the cover layer of the optical disc, respectively;

wherein the optical disc has a first travel distance between its uppermost position and its lowermost position, while the further optical disc has a second travel distance between its uppermost position and its lowermost position, with the second travel distance being different from the first travel distance;

wherein a smaller one of the working distance and the further working distance is set smaller than a larger one of the first and second travel distances;

wherein a distance between an average position

of one face of the optical disc adjacent to the objective lens and a position of a distal end of the objective lens and a distance between an average position of one face of the further optical disc adjacent to the further objective lens and a position of a distal end of the further objective lens are so set as to be not less than a half of the larger one of the first and second travel distances.